

**Remarks**

The Examiner rejected claims 1 to 33 under 35 U.S.C. 102(e) for purportedly being anticipated by United States Patent No. 6,092,114 to Shaffer et al. ("Shaffer").

**Applicant's Application**

Applicant refers the Examiner to the Background of the Invention, page 2, where Applicant has defined the problem in the state of the art as:

"there remains a need for an electronic data communication system for message transmission to wireless communications devices which recognizes the computational power and bandwidth limitations associated with these devices, the varied computational and display capabilities of these devices, the variety of available electronic message formats, and the costs associated with ownership and operation of these devices.", emphasis added.

Applicant describes and claims the conversion of message attachments to address the limited data resolution capabilities (e.g. processing and/or display and/or audio) of the communication devices. Applicant provides amended claim 1 below as an illustrative example of claim amendments for the purpose of addressing the Examiner's objections, also discussed below. In particular, Applicant notes in the claims that that the data size contained in the attachment document as received is greater than the data size of the converted data sent to the network terminal, as matched to the data resolution capabilities of the network device, which is contrary to the operation described for prior art message/attachment conversion systems.

Claim 1 - An electronic data transmission server comprising: a data receiver for receiving a request for transmission of an incoming message including an attachment document to a network terminal over a communications network, the attachment document including content for

presentation on the network terminal and presentation data defining the presentation of the content on the network terminal; a data processing system in communication with the data receiver for converting the attachment document in accordance with the at least one data filtration parameter to accommodate data resolution capabilities of the network terminal, the data processing system being configured to perform the conversion by reducing the number of bytes occupied by the presentation data to provide converted data including the content and the reduced presentation data; and a data transmitter in communication with the data processing system for transmitting an outgoing message containing the converted data to the network terminal over the communications network.

Support for the amendments to independent claims 1, 10, 19, and 23 can be found at page 11, lines 13-25, page 12, lines 5-10 and 25-34, page 16, lines 14-20, and page 18, lines 5-10.

Examiner Cited Art

Shaffer

Applicant notes Examiner's citation of Shaffer, column 1, lines 47-50, which describes the MIME conversion, as a basis for the 35 U.S.C. 102(e) rejection. Applicant is confused by the Examiner's reasoning for relying upon this passage to support the rejection, as MIME is simply a conversion of binary 8 bit data, to 7-bit ASCII characters for message transmission purposes. Applicant strongly believes that MIME conversion to ASCII characters does not result in displayable text (or other presentable information) for use by the user of the network terminal for interaction with the attachment, e.g. reading and understanding the text (e.g. content) of the attachment as intended by the original attachment sender. Instead, Applicant submits that ASCII conversion results in an unintelligible string of characters (not "text"), used for encoding readable text for message transmission purposes only. This string of unintelligible characters is then subsequently decoded at the target destination, once received, in order to

provide the original unchanged message text, which is contrary to the invention as claimed. Applicant invites the Examiner to provide a proper example where message text is first encoded using MIME techniques for subsequent display and interpretation (not decoded) by the intended recipient of the message text.

Applicant provides a simple definition obtained via the Internet from the University of Maryland, Office of Information Technology, which supports Applicant's view of MIME as a messaging protocol, nothing more;

" Today's computer technology thinks in 8-bit bytes. When information is transmitted these days, its usually done so in an 8-bit fashion. However, there are instances when a transport medium will only handle 7-bits. Furthermore, when it comes to E-Mail, there must be some consideration for systems that are based upon IBM's EBCDIC (Extended Binary Coded-Decimal Interchange Code), rather than the ASCII (American Standard Code for Information Interchange) code that we are most familiar with. MIME makes sure that messages meet these criteria! ".

Accordingly, Applicant submits that the Examiner has incorrectly interpreted MIME as conversion from a formatted Word Processing document to a text document, which Applicant points out that MIME is in fact a conversion to data packets for transmission, nothing more.

Further, Applicant submits that Shaffer in column 1 discusses the use of MIME or other available protocols for "accomplishing the encoding" in order "to accommodate transmission within a network" of file attachments. Applicant submits that Shaffer discusses the use of these encoding protocols to convert attached file (of email messages) to text, for facilitating sending of the converted text within the message over the network. Further, Shaffer notes "The converted text is then reconverted to its original form at the receiving client device", emphasis added (see column 1, lines 49-51). Further, Applicant notes at column 1, lines 52-54 that Shaffer notes "At the receiving client device, the same

encoding standard must be used to decode the attached file, if the file is to be accessed", emphasis added.

Accordingly, Applicant submits that Shaffer's discussion of MIME encoding does not address the features of the invention as currently claimed, as the encoding techniques are designed for encoding undifferentiated streams of data, regardless of their context, in order to restore the full data stream at the receiving end, rather than accommodating the data resolution capabilities of the network terminal (as presently claimed).

Further, Applicant submits that Shaffer describes a method and system for exchanging electronic messages, such as email messages, that include isolating personal computers and other client devices from the process of converting a message attachment from one file format to a second file format. In Shaffer's disclosure, file-format conversions are out-tasked to enhance file accessibility, free computer resources, and conserve a user's time. In particular, Shaffer describes that the access requirements of each attachment (to electronic messages) are compared to the application capabilities of a target client device (data resolution of the attachment itself is ignored). If it is determined that a file-format conversion is required, the conversion operation is assigned to a server that supports the process of reformatting the attachments for subsequent access by the application resident on the target client device. Shaffer notes in column 7, lines 12,13, "The file format conversion at step 52 is executed using known techniques. Conventionally, computer software is utilized to change an attachment from one file format to another".

Applicant would like to bring to the Examiner's attention that Shaffer further states "Thus, if a file attachment is received that requires an application that is "foreign" to the receiving computing device, the first issue is whether the computing device is capable of converting the attachment to an accessible file format". Applicant submits that this should be interpreted to mean that Shaffer places emphasis on the ability of the target client device to open the message

attachment, rather than emphasizing changes to the contents of the attachment to address the data resolution capabilities of the network terminal.

Applicant further notes that Shaffer states in column 1, lines 55-64 that "Even if the attached file is properly decoded at the receiving client device, the file will not be accessible unless the client device has the required application program for opening the attached file. Typically, an attachment has a file format that is specific to an application. For example, an email attachment of a word processing text file may be specific to a particular word processing program. Access to the text is possible only if the receiving client device includes the program or has the capability of converting the decoded file to another file format that is accessible.", emphasis added. Applicant submits that this should be interpreted to mean that Shaffer places emphasis on the ability of the target client device to open the message attachment, rather than emphasizing changes to the contents of the attachment to address the data resolution capabilities of the network terminal.

In conclusion on Shaffer, Applicant submits that the correct interpretation of Shaffer is for a simple conversion process, from one format to another. The location is actually given a vague treatment, as client, server and second server are all mentioned as possibilities, with the second server being the preferred embodiment. The fact is that the size of the converted object is never considered. There is also no consideration of the capabilities of the target device for any data size limitations. Accordingly in view of the above discussion, Applicant believes that Shaffer is silent as to changing the contents of the attachment document to address the data resolution capabilities of the network terminal. Instead, Shaffer only discusses the conversion and transmission of the entire content of the attachment, except in a differing format.

On other pertinent Shaffer issues for dependent claims, the Examiner cited column 3, lines 1-20 against Claim 30. Applicant would like to point out to the Examiner that one example for the registry referred to in Claim 30 is a Resource Registry for identifying printing devices on the Internet, not a PC Application

Registry on the client computer as described by Shaffer. This difference is further proof that the teachings of Shaffer should be interpreted as application-centric rather than device-centric.

Further, on page 3 of the Office Action, the Examiner comments on dependent claims 5,14 and 22, and cites that Shaffer in column 1, line 22 should be interpreted as indicating that including graphics as an attachment is not innovative. Applicant strongly believes, in view of the above presented discussion, that doing a MIME conversion of graphics to plain characters will not reduce the byte length of the graphics once displayed, nor will the resolution of the graphics be modified as a result of the MIME conversion. Again, Applicant invites the Examiner to provide proper examples to the Applicant that demonstrate the principle of data size reduction and/or graphics resolution reduction (for message attachments) as a result of MIME conversion. In particular, Applicant reminds the Examiner that any provided data size / graphics resolution reduction benefits of MIME converted data need to be presentable on the network terminal, as claimed.

Accordingly, in view of the above presented arguments and claim amendments, Applicant considers the rejection of claims 1-33 under 35 U.S.C. 102(e) as overcome.

Eggleston

Applicant presents the following as a summary of past consideration given to Eggleston in view of currently amended claims 1-33.

Applicant submits that Eggleston describes a system for allowing wireless clients to control the amount and type of message data received from a remote server. As shown in Figure 2, the Eggleston system includes one or more wireless clients, a communication server, and one or more host servers in communication with the communication server. The communication server includes a profile database of filter parameters for each client (such as Message Priority, Date Sent, Message Size, Author and Subject – see Figure 5). The

profile database also includes granularity filters which specify whether the message should be truncated after "X" bytes, and whether an attachment should be removed from an e-mail message. Upon receipt of a data request from a wireless client, the communication server queries the host computer for the requested data. Using the client's profile data, the requested message is "pre-stage" filtered (either by the host computer or the communication server) before the message is transmitted to the wireless client.

Further, Applicant submits Eggleston does not disclose a data transmission server which is configured to reduce bandwidth requirements by converting content of an attachment to the message, and then transmitting the converted attachment including the content and a reduced byte size of the associated presentation data. The converted attachment data can be sent as an outbound message or as a converted attachment associated with the outbound message.

On the contrary, Applicant submits that Eggleston only discloses the granularity filters to effect the pre-stage filtering of e-mail messages. The disclosed granularity filters are "file attachment", "truncation", and "header information". The "file attachment" granularity filter provides the mobile client with one of two options: (1) it allows the entire e-mail attachment to be transmitted to the client, or (2) it prevents the e-mail attachment from being transmitted to the client. The "truncation" granularity filter only transmits the first X bytes of the e-mail message Integrum. The "header information" granularity filter only extracts header information from the e-mail message.

Further, Applicant notes that neither the "truncation" nor "header information" granularity filters of Eggleston process e-mail attachments at all. Any construction of Eggleston to include such features should be considered as impermissible hindsight in view of Applicant's specification. Applicant submits that by Eggleston including "file attachment" as an available granularity filter (when discussing separate "truncation" and "header information" granularity filters at column 8, line 31 through column 9, line 2), Eggleston demonstrates that the "truncation" and "header information" granularity filters only process e-

mail message bodies, not e-mail attachments. To conclude otherwise would render the "file attachment" filter redundant. Applicant submits Eggleston included the "file attachment" filter as a required mechanism for removing e-mail attachments from their respective e-mail messages, and the "truncation" and "header information" granularity filters are intended for processing e-mail message text only.

Accordingly, Applicant believes Eggleston does not teach or even suggest reducing network bandwidth usage by differentiating in a message the content of an attachment document from its presentation data, and then forwarding the content and amended presentation data to the recipient as converted data/document, as now recited in independent claims 1, 10, 19, and 23.

Conclusion

In light of the above remarks and the amendments submitted herewith, the Applicant submits that independent claims 1, 10, 19, and 23 are novel over the cited references to date, taken either alone or in combination. As the remaining claims are dependent on, and narrower than, independent claims 1, 10, 19, and 23 the Applicant submits that these claims are similarly novel over the cited reference.

It is believed that the above remarks and amendments submitted herein have placed this present application in condition for allowance, and a Notice thereof is requested. If the Examiner has further concerns, he is encouraged to

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contact Applicant's undersigned agent at (416) 862-4318. All correspondence should continue to be directed to listed address shown below.

Respectfully submitted,

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